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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

DANIELSEN, NATHAN ANDREW

ART UNIT	PAPER NUMBER
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2627

NOTIFICATION DATE	DELIVERY MODE
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ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DocketingDept@young-thompson.com

Office Action Summary	Application No. 10/577,227	Applicant(s) MURAMATSU ET AL.	
	Examiner Nathan Danielsen	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>04/26/06 & 07/30/08</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. Claims 13-26 are pending. Claims 1-12 have been canceled in applicant's preliminary amendment filed 26 April 2006.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 18-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
 - a. Regarding claims 18 and 24-26, it is unclear whether the "information recording apparatus" or the "information recording medium" comprises at least the first and second recording layers based on the following limitation from the claims: "said information recording apparatus for recording record information onto an information recording medium comprising". For purposes of examination, the "information recording medium" is interpreted to comprise at least the first and second recording layers.
 - b. Claims 19-23 are rejected as being dependent on an indefinite claim.
 - c. Further regarding claims 25 and 26, each recites the limitation "said computer program" in line 4. There is insufficient antecedent basis for this limitation in the claim.

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Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claims 13, 14-18, 20-22, and 24-26 are rejected under 35 U.S.C. 102(a) as being anticipated by Miyagawa et al (US Patent Application Publication 2004/0264339; hereinafter Miyagawa).

Regarding claims 13, 18, 24-26, Miyagawa discloses an information recording apparatus (and associated computer program product in a computer-readable medium for tangibly embodying a program of instructions executable by a computer provided for the information recording apparatus) for recording record information onto an information recording medium (figure 4), the information recording medium comprising:

(i) a first recording layer ("first information recording layer" in figure 4) having a first calibration area in which test information for calibrating a power of laser light can be recorded (element 304a in figure 4 and ¶ 42); and

(ii) a second recording layer ("second information recording layer" in figure 4) having a second calibration area in which the test information can be recorded (element 302b in figure 4 and ¶ 42),

wherein the first calibration area and the second calibration area comprise a space area having a predetermined size in positions facing each other (elements 303a and 303b in figure 4 and ¶ 50),

said information recording apparatus comprising:

a first calibrating device (inherent in ¶s 54, 67, 69, and 70) for calibrating the power for recording the record information into said first recording layer, by recording the test information into a recording area located on one side, centered on the space area, out of the first calibration area (¶s 54 and 67; where, when test recording is carried out on the optical disc of figures 3 and 4, test recording is carried out in the first recording learning region

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(element 304a) starting at a free portion thereof which is closest to the protection region (element 303a) on the first layer, as indicated by arrow 313a);

a second calibrating device (inherent in ¶s 54, 67, 69, and 70) for calibrating the power for recording the record information into said second recording layer, by recording the test information into a recording area located on other side which is opposite to the one side, centered on the space area, out of the second calibration area (¶s 54 and 67; where, when test recording is carried out on the optical disc of figures 3 and 4, test recording is carried out in the second recording learning region (element 302b) starting at a free portion thereof which is closest to the protection region (element 303b) on the first layer, as indicated by arrow 313b); and

a recording device for recording the record information by irradiating the laser light having the power which is calibrated by at least one of said first calibrating device and said second calibrating device (¶s 67, 69, and 70).

Regarding claims 14 and 22, Miyagawa discloses everything claimed, as applied to claims 13 and 18, respectively. Additionally, Miyagawa discloses where said information recording medium has a disc-shape (figures 1 and 2), and the predetermine size is a sum of an eccentricity in each of said first recording layer and said second recording layer and a radius of a laser spot in said first recording layer in the case in which the laser light is focused on said second recording layer (¶ 66).

Regarding claim 15, Miyagawa discloses everything claimed, as applied to claim 13. Additionally, Miyagawa discloses where position information which indicates a position of the space area is recorded in at least one of said first recording layer and said second recording layer (¶ 58; where the disclosed address information, which is recorded of the entire disk surface as the wobble of the track, indicates the position, or address, of each element in figures 3 and 4, which includes elements 303a and 303b).

Regarding claim 16, Miyagawa discloses everything claimed, as applied to claim 13. Additionally, Miyagawa discloses where said information recording medium has a disc-shape (figures 1 and 2), and the one side is an outer circumferential side of said information recording medium, and the other side is

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an inner circumferential side of said information recording medium (note the relative positions of elements 303a and 304a as well as the relative positions of elements 302b and 303b in figures 3 and 4).

Regarding claims 17 and 21, Miyagawa discloses everything claimed, as applied to claims 13 and 18, respectively. Additionally, Miyagawa discloses where, in the first calibration area, an area portion of a predetermined size is used toward one direction when the test information is recorded (¶s 54 and 67; where, when test recording is carried out on the optical disc of figures 3 and 4, test recording is carried out in the first recording learning region (element 304a) starting at a free portion thereof which is closest to the protection region (element 303a) on the first layer, as indicated by arrow 313a, and where the predetermined size is inherent in ¶s 54 and 67), and in the second calibration area, an area portion of a predetermined size is used toward other direction which is opposite to the one direction when the test information is recorded (¶s 54 and 67; where, when test recording is carried out on the optical disc of figures 3 and 4, test recording is carried out in the second recording learning region (element 302b) starting at a free portion thereof which is closest to the protection region (element 303b) on the first layer, as indicated by arrow 313b, and where the predetermined size is inherent in ¶s 54 and 67).

Regarding claim 20, Miyagawa discloses everything claimed, as applied to claim 18. Additionally, Miyagawa discloses where said first calibrating device records the test information in order from one end portion of the starting point and the end point of the first calibration area (¶s 54 and 67; where, when test recording is carried out on the optical disc of figures 3 and 4, test recording is carried out in the first recording learning region (element 304a) starting at a free portion thereof which is closest to the protection region (element 303a) on the first layer, as indicated by arrow 313a), and said second calibrating device records the test information in order from other end portion of the second calibration area which is opposite to the one end portion (¶s 54 and 67; where, when test recording is carried out on the optical disc of figures 3 and 4, test recording is carried out in the second recording learning region (element 302b) starting at a free portion thereof which is closest to the protection region (element 303b) on the first layer, as indicated by arrow 313b).

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Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miyagawa, in view of Lee (US Patent Application Publication 2004/0264317).

Regarding claim 23, Miyagawa discloses everything claimed, as applied to claim 18. However, Miyagawa fails to disclose where said first calibrating device prepares first use condition information which indicates a recording condition of the test information in the first calibration area, and said second calibrating device prepares second use condition information which indicates a recording condition of the test information in the second calibration area.

In the same field of endeavor, Lee discloses where said first calibrating device prepares first use condition information which indicates a recording condition of the test information in the first calibration area (MAP0 (element 512) in figure 5 and ¶s 42 and 43), and said second calibrating device prepares second use condition information which indicates a recording condition of the test information in the second calibration area (MAP1 (element 522) in figure 5 and ¶s 42 and 43).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the apparatus/recording medium/functionality of Miyagawa with that of Lee, for the purpose of enabling a recording apparatus to rapidly identify usable parts of OPC areas prior to performing an OPC process (¶ 42).

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9. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miyagawa, in view of Hashimoto (US Patent 5,706,271).

Regarding claim 19, Miyagawa discloses everything claimed, as applied to claim 18. However, Miyagawa fails to disclose where the information recording apparatus further comprises a judging device and a stopping device.

In the same field of endeavor, Hashimoto discloses where the information recording apparatus further comprises:

a judging device for judging whether or not the test information can be recorded while remaining the space area in positions facing each other in both the first calibration area and the second calibration area (element 14 in figure 2 performing (see col. 5, lines 4-8) at least step S17 in figure 18 (see col. 7, line 61 through col. 8, line 13)); and
a stopping device for stopping the calibration of the power performed by each of said first calibrating device and said second calibrating device if it is judged that the test information cannot be recorded while remaining the space area (element 14 in figure 2 performing (see col. 5, lines 4-8) at least step S5 in figure 18 (see col. 7, line 61 through col. 8, line 13)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the apparatus/functionality of Miyagawa with that of Hashimoto, for the purpose of increasing the reliability of an OPC operation (col. 8, lines 14-17).

Relevant Prior Art

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
d. Narumi et al (US Patent Application Publication 2003/0185121) discloses an optical recording medium such as is found in at least claims 13, 16, 18, and 24-26 (see at least figure 11 and the related portion(s) of the disclosure).

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Closing Remarks/Comments

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan Danielsen whose telephone number is (571)272-4248. The examiner can normally be reached on Monday-Friday, 9:00 AM - 5:00 PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, A.L. Wellington can be reached on (571) 272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ND/
12/31/2009

/William J. Klimowicz/
Primary Examiner, Art Unit 2627